

Fallugia paradoxa (*Atriplex canescens*, *Ephedra torreyana*) Cinder Shrubland

COMMON NAME	Apache Plume (Four Wing Saltbush, Torrey's Joint Fir) Cinder Shrubland
PHYSIOGNOMIC CLASS	Shrubland
PHYSIOGNOMIC SUBCLASS	Deciduous shrubland
PHYSIOGNOMIC GROUP	Cold-deciduous shrubland
PHYSIOGNOMIC SUBGROUP	Natural/Semi-natural Cold-deciduous shrubland
FORMATION	Broad-leaved and microphyllous evergreen extremely xeromorphic subdesert shrubland
ALLIANCE	<i>Fallugia paradoxa</i> Shrubland Alliance

CLASSIFICATION CONFIDENCE LEVEL Low Confidence, this association has only been described from Sunset Crater Volcano NM and Wupatki NM. No additional global description data available.

USFS WETLAND SYSTEM Upland

RANGE

Sunset Crater Volcano National Monument

Apache Plume (Four Wing Saltbush, Torrey's Joint Fir) Cinder Shrubland is a common association within the mapping area for Sunset Crater Volcano NM. It is found within Sunset Crater Volcano NM on cinder cones and in flat areas specifically on Sunset Crater and Lenox Crater. In the project environs this association is also seen on cinder cones and lower elevations areas. It was mapped on Darton Dome, Robinson Crater, Black Mountain, and in the surrounding more level areas.

ENVIRONMENTAL DESCRIPTION

Sunset Crater Volcano National Monument

Apache Plume (Four Wing Saltbush, Torrey's Joint Fir) Cinder Shrubland has an elevation that ranges from 2,130-2,440m (average 2,254m). The slope ranged from 7-50% (average 20%). It is generally found on cinder gravel.

MOST ABUNDANT SPECIES

Sunset Crater Volcano National Monument

<u>Stratum</u>	<u>Species</u>
Shrub	<i>Fallugia paradoxa</i>

ASSOCIATED SPECIES

Sunset Crater Volcano National Monument

Andropogon hallii, *Eriogonum corymbosum*, *Pinus edulis*, *Pinus ponderosa*

VEGETATION DESCRIPTION

Sunset Crater Volcano National Monument

Apache Plume (Four Wing Saltbush, Torrey's Joint Fir) Cinder Shrubland total vegetation cover ranged from 6-20% (average 14%). The tree layer was sparse (1-2% absolute cover), the shrub layer ranged from 3-15% absolute cover (average 8%), and herbaceous layer 1-8% (average 4%). Species richness among the four relevés measured ranged from 3-14 species (average 10 species).

The tree layer is sparse with scattered *Pinus ponderosa* and *Pinus edulis*. The shrub layer is the most defining stratum with *Fallugia paradoxa* cover ranging from 3-15% cover (average 10%). The herbaceous layer was sparse with no defining species.

USGS-NPS Vegetation Mapping Program
Sunset Crater Volcano National Monument

Globally

This plant association also occurs at Wupatki NM. At Wupatki NM four wing saltbush (*Atriplex canescens*) and Torrey's joint-fir (*Ephedra torreyana*) commonly co-occur in this association. However, at Sunset Crater Volcano NM four wing saltbush and Torrey's joint-fir were never found to occur within the association.

CONSERVATION RANK G?

DATABASE CODE C EGL005806

MAP CLASSES

The association Apache Plume (Four Wing Saltbush, Torrey's Joint Fir) Cinder Shrubland is represented as Apache Plume / Cinder Sparse Vegetation (map code 5).

Apache Plume / Cinder Sparse Vegetation is mapped as occurring in small patches throughout the entire project area. The total area of Apache Plume / Cinder Sparse Vegetation mapped in Sunset Crater Volcano NM is 27 hectares within 33 polygons and in the park environs is 202 hectares within 159 polygons.